

## **How to Navigate on a Budget: Boating Apps for your iPhone or Android Device**



**Writer: Tom McCluskey**

Gone are the days when boaters had to spend hundreds and often thousands of dollars on gear to safely navigate our local, nearby rivers, sounds and ocean waters. If your boat is equipped with installed multifunction displays (MFD's) such as a chart plotter, autopilot, radar, sonar or depth/fish finder, that's great. These marine electronics from the likes of Garmin, Raymarine, Simrad and others have increased in accuracy, sophistication, and resolution over the years, while their complexity and costs have increased accordingly. If your boat is so equipped, they are no doubt indispensable to your navigation, comfort, satisfaction and safety. If you are on a budget, however, there is good news: Your portable iPhone or Android device may be used for basic navigation, geolocation and weather radar—at a fraction of the price of installed hardware. It's increasingly rare these days to meet any boater without at least one navigation application on their phone or tablet. Moreover, your personal mobile device, since it travels with you, is not subject to damage, theft, and deterioration due to the elements. Last year, for example, I lost a couple of Garmins due to a nearby lightning strike.

Boating purists are known to have their own preferred way of navigation, be it celestial, GPS, map and compass, dead reckoning or hard-learned local knowledge. Where installed MFD's set the standard for present day real-time data essential to safe boating, many apps available to Android and iOS users are actually quite advanced—with prices ranging from free, to minimal one-time purchase, to a higher priced subscription model if you want more advanced capabilities. Some apps cater more to a sailor's interests—as opposed to recreational power boaters, who may care less about wind direction and if the tide is fair or foul, than whether it's going to be sunny. The number one benefit of these apps is that you will absolutely have access to near real time data without the cost and immobility of an MFD.

Nearly all these apps deliver fast, reliable data within an intuitive interface. Their charts show sensible levels of detail as you zoom in and out and, most importantly, will warn you when you need to zoom in more to see dangers that might have been hidden by vector charts. Sailors who require access to wind and current data can overlay this information onto their charts with some of these apps while also measuring distance and bearing to a destination point. Although there are many app choices, no one application delivers

everything. Much depends on personal preference and what works best for your type of boat.

Here is a list of a few of the most popular integrated marine navigation apps for both sailing vessels and power boats: While not comprehensive, it can give you a starting point for doing your own research on the best app for you.

**Aqua Map** - Already one of the most popular apps out there, a recent upgrade in version 30 of this app adds an Aqua Map Master app subscription (\$14.99 per year) that entitles users to overlay marine forecasts for wind, waves, and currents directly onto the map. It incorporates officially sourced information from USACE and USCG, NOAA weather, downloadable official nautical charts, Active Captain, fuel prices along your route—and even a handy anchor alarm.

**iNavX** - This marine navigation app is one of the more established handheld GPS chartplotter apps incorporating data from multiple sources—including map and meteorological data, the Waterway Guide, and even fishing spots.

**Pro Charts** - This marine navigation app incorporates NOAA charts with depths and other charts and allows for quick addition of waypoints and download of charts for use when outside of cell service range.

**Navionics** - Easy to use with an intuitive interface, charts are quick to render and auto zooming of detail is near best in class. Text is used to good effect and tells you when you need to zoom in to get more information about hazards (one of the dangers of vector charts). Arrows showing current are animated to show strength, direction and whether the tide is on the ebb or flood. The Navionics Sonar option allows charts to be adapted to show depths based on real time user data from thousands of vessels, although factors such as barometric pressure may cause variance in some of the depth data.

**Savvy Navvy** - One of the newer navigation apps built more with yacht sailors in mind, this app gives easy access to wind, current and tide overlays to sensibly detailed charts. Its routing algorithm specifically accounts for current, and its passage plans map out informative courses to steer.

**C-MAP** - This app's charts include just the right amount of detail for spot depths, enlarged navigational marks on land and sea and allows for easy overlay of predicted wind speeds, but, there is currently no tide and current overlay and no option for satellite view.

These are just a few of the more popular apps available today. Please do your own research to determine which app, if any, might be right for you and your vessel. And please remember, even with all this available technology, it is always good to have a hard

copy laminated chart for those areas you frequent on the water—especially given the shoaling and local hazards that arise from time to time on our dynamic waters.

Next: Stay tuned for part two of our boating apps series: Social media apps for boaters.

This article is given the courtesy of America's Boating Club of the Pamlico. **Several courses are being taught and more** planning is underway for 2022 that includes advanced courses as well as 4 hour seminars. To learn more about our boating courses, email our Education Officer at [psps@gmail.com](mailto:psps@gmail.com). We invite you to reference our website at <https://pamlicosailandpowersquadron.org> to learn more and to keep up on the education opportunities offered.